

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859710010-9

VICK, A. A.

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VÍČEK, Antonín A

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

Polarographic diffusion currents. I. Review and discussion of earlier results. Antonín A. Víček (Polarografický ústav, Prague, Czech.). Chem. Listy 47, 1426-30 (1953).
Earlier theoretical investigations of the diffusion of the depolarizer to the dropping electrode are reviewed. Assumptions under which the Il'ković equation (I) were derived and conditions under which I was applicable were critically discussed. In the majority of cases where exptl. deviations from I were found, the limits of applicability of I were not respected; I reproduced exptl. results better than the corrected equations (II). According to II, the deviations were due to the influence of flow rate rather than to the drop time. II. Diffusion currents at controlled drop times. *Ibid.* 1440-57.—Under conditions defined above the influence of flow rate and of drop time was investigated separately. An electrode with adjustable drop time was used. A method for calcn. of instantaneous flow rate from exptl. data was given. Exptl. results showed that the deviations of the simple Il'ković equation were caused by a change of flow rate during the drop time at low flow rates or by electrolyte whirling at high flow rates. Some characteristics of whirling, caused by the sepn. of the drop from the capillary, were pointed out. Gelatin deformed the *i-t* curves and caused greater deviations from I. Two further conditions were proposed, under which the best fulfillment of I was to be expected. B. Erdős.

VÍČEK, Antonín A.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

②⁷

Polarographic behavior of chlorides. Antonín A. Víček
(Polarograph. Ústav, Prague, Czech). *Chem. Listy* 47,
1508-1509 (1953).—From the dependence of mean current
on concn., height of reservoir, presence of gelatin, compn.
of soln. (best developed waves were in a soln. contg.
0.1M Na₂SO₄ and 0.001M H₂SO₄), and from measurements
of instantaneous currents, it was deduced that the most
probable primary process was the formation of a film con-
sisting of Cl atoms chemically adsorbed on the Hg surface.
In a later stage of the drop, this film was destroyed and de-
position of Hg₂⁺⁺ ions began. The resulting Hg₂Cl₂
formed a continuous layer on the electrode surface. The
Hg₂Cl₂ and Hg₂Cl₂⁻ ions were probably present in the soln.
in the electrode environment. The current was controlled
by the diffusion rate (I) of Cl⁻ ions to the electrode sur-
face and by the rate of penetration (II) of the Hg₂⁺⁺ ions through
the layer adhering to the electrode. At high Cl⁻ concns.,
II alone detd. the value of the current. In the presence of
gelatin, the Cl⁻ waves were well developed and were suit-
able for analytical purposes. E. Erdős

VICEK, Antonin A.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

Polarographic behavior of molybdenum in concentrated sulfuric acid. Antonin A. VICEK (Polarograf, Olav, Prague, Czech.). Chem. Listy 47, 1102-4 (1953).--The molybdate ion showed in concd. H_2SO_4 (92% by wt.) two waves: at potentials +0.19 and -0.05 v. vs. the normal calomel electrode. The waves showed an unusual dependence on the height of the reservoir and were higher than waves of other ions in the same medium. This was ascribed to the reoxidation in the interphase of Mo^{3+} and Mo^{4+} (the reduction products) to Mo^{4+} and Mo^{5+} . The kinetic component of the limiting current was relatively small; this was explained by the presence of SO_2 which was formed in the interphase reaction. E. Erdős

Polarographic behavior of chlorine. Antonín A. Vlček
(Polarogr. Listy ČSAV, Prague, *Chem. Listy* 48, 1469-
73(1954); *J. C.I.* 48, 541-542). Elementary Cl gives a
cathodic wave at potential of the calomel electrode. In
the presence of Cl^- ions an anodic-cathodic oxidation-re-
duction wave is formed. In the presence of Cl the reduc-
tion is due to the Hg_2Cl_2 which is formed on the electrode
surface by a reaction: $2\text{Cl}^- \rightarrow 2\text{Hg}^+ + \text{Hg}_2\text{Cl}_2$; the Cl^-
ions are formed by the reduction of Cl_2 with the 2Hg^+ ions.
At pos. potentials the cathodic current of Cl_2 is compensated
by an anodic current arising from the Cl_2 which reacts
with the Cl^- ions to give Cl_2 . E. Endo

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VICEK, A.A.

CZECH

V Polarographic behavior of hydrogen in nonaqueous solvents. I. Solutions of strong acids in acetonitrile. Antonín A. Víček (Polarografický ústav ČSAV, Prague). *Chem. Pap.* 43, 1141-1151 (1954). Cf. following abstr. In CH₃CN as solvent, H⁺ ions are discharged at more pos. potentials than in H₂O. With increasing concn. of H₂O, the H⁺ wave is rapidly shifted to more neg. potentials. By the method previously given (cf. preceding abstr.), the overvoltage of H₂ in CH₃CN referred to H₂O was approx. 0.82 v., the half-wave potential of H₂ in anhydrous CH₃CN on the K scale was +2.60 v., i.e., -0.69 v. against the *N*-Hg₂Cl₂ electrode. E. Erida

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169651 Polytetrafluoroethylene (PTFE) Polymerization
Reaction Conditions

formation of Cl atom film is the primary process. Table
Graphic diagram: polymerization of PTFE

CZECH

Relation between the electronic structure and polarographic behavior of inorganic depolarizers. 1. Basic rules. Antonín A. Vlček (Polarograf. ústav CSAV, Prague). *Chem. Listy* 49: 478-84 (1955).—There is a relation between the mechanism of the electrode reaction and electronic structure of inorg. depolarizers. If the stable ($n - 1$)d orbitals are free, an electron is accepted therein directly, the process not being influenced by the mol. orbits and ligands. An electron is accepted into the ($n - 2$)f orbit in 2 steps. If the inner orbits are fully occupied, an electron may be accepted either into the outer orbit or into 1 hybridized orbit set free by a preceding reaction. If an electron is accepted into the outer orbit without any rapid change of configuration, the process takes place at very neg. potentials. It may be supposed that particles having an outer electron are not reducible. The electrode process accompanied by a change of the no. of covalent bonds is irreversible. The irreversibility of this process is probably due to slow formation of a covalent bond. — P. Stráfelda.

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CZECH

Polarographic reversibility of the system europium⁺⁺-europium⁺⁺⁺. Preliminary communication. Antonín A. Vlček (Polarograf. ústav CSAV, Prague). *Chem. Listy* 49, 535-54 (1955).—According to the rules for the relations between the electronic structure and polarographic behavior of inorg. depolarizers derived by the author (cf. preceding abstr.), it was not possible to suppose Eu⁺⁺⁺ to be reversibly reducible, as some authors did. In fact, the system Eu⁺⁺-Eu⁺⁺⁺ was irreversible, as was experimentally proven in the solns. of some anions. A perfect oxidation-reduction wave appeared only in solns. of com. type III. P. Štráfelc.

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29

Ca

Enzymic tanning baths. A. K. Vack. *Stoffe*
Manufaktur 38, 558. The tests carried out confirmed that
the activating effect of salts in enzymic tanning baths is
limited to the proportions used in the aqueous and exists
itself only in the presence of wood flour. This activating
effect consists in a displacement of the adsorption of the
tryptic proteinase on the wood flour or in a modification
of the adsorption conditions. It increases in the following
order: SO_4 , Cl , Br , NO_3 , I , SCN for the anions, and K ,
 Na , NH_4 , Si for the cations. J. Pannou-Conture /

ASAC-ELA METALLURGICAL LITERATURE CLASSIFICATION

VÍČEK, B.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

② 5
A discontinuously rotating electrode. B. Víček (Výzk.
ústav svrakové tech., Prague, Czech.). Chem. Listy 47,
1234-5 (1953).—A polarographic Pt electrode is described
which changes in regular time intervals (1-6 sec.) its posi-
tion in the soln. The electrode can be used for kinetic
studies of consecutive reactions and for normal polarog-
raphy. E. Erdős

VICEK, B.

The diffusion methods for developing photographs.

P. 600 (Chemie) Vol. 9, No. 4, Aug. 1957, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

VICEK, F.

Relation between the general contractor of prefabricated structures and the direct investor, p. 68, ZA SOCIALISTICKOU VEDU A TECHNIKU (Pripravny vybor vedeckych technickch spolecnosti pri eskoslovenske akademii ved) Praha, Vol. 5, No. 2, Feb. 1955

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 4, No. 12, December 1955

VICEK, I.

Economic value of road investments and of transportation time.

p. 2 (Silnice) Vol. 6, no. 9, Sept. 1957, Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

VICEK, J.

"Through technical development and new organization of research to a successful fulfillment of the increased tasks of the Five-Year Plan." (p. 131) CESKOSLOVENSKÝ PRŮMYSL (Ministerstva těžkeho a lehkého průmyslu) Praha, Vol 7, No 4, Apr. 1951.

SO: East European Accessions List, Vol 3, No 8, Aug 1954

VICEK, J.

Construction of supports has been improved at the Dukla Mine. p.6. (Technick
Noviny, Praha, Vol. 2, No. 23, Dec. 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, No. 6, June 1955, Uncl

VICEK, J.

Road building and caterpillar tractors. p.16.
(Silnice, Vol. 6, No. 2, Feb. 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

VICEK , J.

"Machinery industry and technological progress in Czechoslovakia."

p. 42 (Tezhka Promoshlenost) Vol. 6, no. 9, Sept. 1957. Sofia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7 no. 5, May 1958

VICENTIJEVIC, C.

"Dignosis of brucellosis by the classical diagglutination method." Vet. Scientific - research & diagnostic Inst. of the Republic of Srbije."

Vet. Glasnik 6 : 79-94, 1952

VÍCEK, K.

CZECHOSLOVAKIA/General Problems of Pathology - Tumors.

T-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 12812

Author : Kleint, Zd., Kafka, V., Matejovsky, M., Vicek, K., Zak, F.

Inst : Not given.

Title : Endobronchial Sarcoma in a 3-year old Child.

Orig Pub : Caskosl. pediatrie, 1956, 11, No 12, 895-900.

Abstract : No abstract.

Card 1/1

Vicek, K.

Three-hinged prestressed-concrete arched bridge across the Danube.
Tr. from the German. p. 194. INZENYRSKE STAVBY. (Ministerstvo
stavebnictvi) Praha. Vol. 4, no. 4, April 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

Vicek, M.

Vicek, M. The damping of Helmholtz resonators. (Conclusion). p. 622.

Vol. 17, no. 11, Nov. 1956

SLABOPROUDY OBZOR

TECHNOLOGY

Czechoslovakia

So. East European Accessions, Vol. 6, May 1957
No. 5

SKACH, M.; MICHNEVICOVA, A.; DOHNAL, M.; VICEK, V.

Local antibiotic therapy with tetracyclines in stomatology. Cas. lek. cesk. 98 no.6:179-182 6 Feb 59.

1. II. stomatologicka klinika KU v Praze, prednosta doc. dr. F. Urban. Vyskumny ustav antibiotik Roztoky, prednosta doc. dr. M. Herold. M. S., Praha 2, U nemocnice 1.

(MOUTH, dis.

ther., local tetracycline (Cz))

(TETRACYCLINE, ther. use

mouth dis., local admin. (Cz))

DOHNAL, M.; VICNEK, V.

Production of Czechoslovak tetracycline. Rev. Czech. M. 4 no.1:40 1958.

1. Antibiotics Research Institute, Roztoky near Prague, Director: Doc.
Ing. M. Herold.

(TETRACYCLINE, prep.
prod. of Czech. tetracycline)

VICEK, V.; SCHMIDT, J.

New trends in the evaluation of malt barley. p. 26. (Kvasny Prumysl, Vol. 3, No. 2, Feb 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

VICEK, V.; ENGL, O.

"Critical recrystallization of boiler material."

ENERGETIKA, Praha, Czechoslovakia, Vol. 8, No. 8, August 1958

Monthly list of East European Accessions Index (EEAI), Library of Congress,
Vol. 8, No. 8, August 1959

Unclassified

VICEK, V.

On economical operation of the malting kilns. p. 225.

KVASNY PRUMYSYL. Praha, Czechoslovakia. Vol. 5, no. 10, Oct. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 9, no. 2, Feb. 1960.
Uncl.

VÍCEK, V.; SKRIVANEK, J.

Significance of axial stirring in absorption columns. p. 23

CHEMICKÉ PRŮMYSL. (Ministerstvo chemického průmyslu) Praha, Czechoslovakia
Vol. 9, No. 1, Jan. 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 7, July 1959
Uncl.

Vicek, Vlastimil

4
Significance of axial mixing in absorption columns. Jaro-
slav Skřivánek and Vlastimil Vítek (Research Inst. Labor.
Chem., Univ. Czech.). Chem. Průmysl 9, 23-24 (1960).
Relations defining the lowering of absorption efficiency of
packed columns due to axial mixing are derived. A new
term, the height of a mixing unit is introduced; and factors
influencing this value are discussed qualitatively. H. N.

DOHNAL, M.; DOSKOCIL, J.; HEROLD, M.; SMAHEL, O.; VICEK, V1.

Aureomykoin; chlortetracycline produced in Czechoslovakia.
Cas. lek. cesk. 94 no.51:1393-1396 16 Dec 55.

(CHLORTETRACYCLINE,
prod. in Czech.)

VICEK, Z.

VICEK, Z. - Protection of electric motors against phase failure.
p. 247, Vol. 11, no. 8, Aug. 1956
ELEKTROTECHNIK. (Ministerstove strojirenstvi) Praha.

SOURCE: EAST European Accessions List (EEAL) Vol 6, no. 4,--April 1957

VICER 2.

VICEK, Z.

TECHNOLOGY

Periodical AUTOMATISACE. No. 11, Nov. 1958.

VICEK, Z. Experiences in the field of remote control by applied audio-frequency in Czechoslovakia. p. 359.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959. Uncl.

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538.114

4773. On the connection between the coercive force of a ferromagnetic and internal stress. F. VICINA. Czech. J. Phys., 4, No. 4, 419-38 (Nov., 1954) In Russian, with summary (3 pp) in English.

An extension of the internal stress theory of Néel. Account is taken of the spatial and angular distribution of the internal stresses, the regions of homogeneous stress being taken to be spherical and the angular distribution to be isotropic. Both boundary surface tension and internal magnetic pole effects were considered, the former effect being found to be much more important than was found by Néel, especially for iron where it predominates. With an internal stress of magnitude 30 kg.mm^{-2} the observed coercive force of iron (~ 1 oersted) and nickel (~ 10 oersted) can be accounted for; minimum values due to magnetostrictive stresses may also be derived.

E. P. WOHLFARTH

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VICENA, F.

Vicena, F. Notes on the work on pure iron; also, answers by J. Bednar and others. p. 482. Third General Assembly of the Czechoslovak Academy of Sciences. p. 491. CESKOSLOVENSKY CASOPIS PRO FYSIKU. Praha. Vol. 2, no. 4, Sept. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 11, Nov. 1955, Uncl.

VICENA, F.

Vicena, F. Effect of stresses produced during precipitation on the coercive force of ferromagnetics. p. 526. CSEKOSLOVENSKY CASOPIS PRO FYZIKU. Praha. Vol. 4, no. 5, Oct. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 11, Nov. 1955, Uncl.

CZECH

538.27
4836. On the question of the effect of stresses produced during precipitation. E. VIGMA, Czech. J. Phys., 5, No. 1, 11-17 (Feb., 1955) in Russian.

It is assumed that various physical processes such as age hardening, work hardening or the presence of dislocations will affect the existence of internal stresses of various types in a ferromagnetic body that their influence on the coercive force will therefore differ. The effect of internal stress produced in the process of precipitation in the vicinity of particles of the precipitated phase on the coercive force of the ferromagnetic is investigated. The following assumptions are made: the form of the precipitated particle is regarded as isotropic (spherical), the Bloch wall is considered plane and the distance between the precipitates is considered large in comparison with their size. The character of the tension in the surroundings of the spherical precipitate was investigated by Mott and Nabarro (1940). Their explanation of the tensor of tension in the surroundings of the precipitates was taken as a basis for the present calculations. Particular attention was paid to the influence of the effect of surface tension of the Bloch wall and the effect of magnetic charges. It is shown that with spherical particles the first influence need not be considered at all, due to the symmetry existing, and that the second can be neglected in comparison with the effect of magnetic charges produced on the surface of a particle of the precipitate on the direction

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Wieder, F.
of spontaneous magnetization. The conclusion is drawn that with precipitates of spherical shape (e.g. carbide of iron, Fe₃C, in iron) the internal stresses produced by them in their vicinity during precipitation do not in any marked degree influence the movement of the Bloch wall across these inclusions and thus also the coercive force. Thus the opinion held by some authors that the internal stresses influencing the coercive force (which is the subject of the "stress theory") were produced in the vicinity of the precipitates during age hardening, is not justified.

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VIENNA, A.

Effect of dislocation on the coercive force of ferroalloys. . . 274.

CESKOSLOVENSKY CASOPIS PRO FYZIKU vol. 5, no. 5, Sept. 1959

Czechoslovakia

so. EAST EUROPEAN ACCESSIONS LIST vol. 5, no. 7 July 1956

VICENA, F.

"On the Theory of Coercive Force and of the Magnetization Curve" P. 14
(CESKOSLOVENSKY CASOPIS PRO FYSIKU Vol. 4, No. 1, Feb. 1954 Praha, Czech.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4,
April 1955, Uncl.

VICENA, FRANTISEK

CZECHOSLOVAKIA / Magnetism, Ferromagnetism.

F-4

Abs Jour : Ref Zhur - Fizika, No 3, 1957, 6852

Author : Vicena, Frantisek

Title : Effect of Dislocations on the Coercive Force of Ferromagnetics.

Orig Pub : Ceskosl. casop. fys., 1955, 5, No 5, 492 - 510

Abstract : See Referat Zhur - Fizika, 1956, 11908

Card : 1/1

VICENA, Ivo, inz., ScC.

Two important problems of the gradual shelterwood cutting system. Les cas 9 no.4/5:493-495 '63.

1. Vojenske lesy a statky, pracoviste Horni Plana.

VICEM, P.

Connection between the coercive force of ferromagnetic substances and

internal stress. P. 408

CESKOSLOVENSKY CASOPIS PRO FYZIKU, Vol. 4, No. 4, Sept. 1954

SOURCE: East European Accessions List Vol. 4, No. 11 November 1955

VICENTIEVIC, C

Testimony of Clerk, Vol 15, No 11, 1961

- [illegible]

YUGOSLAVIA

VICENTIJEVIC, Cad., Serbian Veterinary Improvement Institute (Zavod za Unapredjenje Veterinarstva SRS), Belgrade.

"Determination of Types of Serum in Leptospirosis in Domestic Animals in Serbia."

Belgrade, Veterinarski Glasnik, Vol 17, No 9, 1963, pp 751-756.

Abstract: [Author's English summary modified] Serological tests of 64,809 blood samples from various types of domestic animals in both the socialist sector and the private sector of agriculture showed that leptospirosis was caused in Serbia most often by the serotypes of L. pomonae, L. icterohemorrhagiae, L. mitis, and L. sejroe. The serotypes of L. Bataviae, L. Australis, and L. pyrogenes were not found. The serotype of L. pomonae was the most common one found in all the varieties of animals included in the study, especially hogs, and caused the formation of maximum concentrations of antibodies (1:30,000-1:1,000,000). Hogs were the primary hosts for the serotype of L. pomonae and were the source of L. pomonae infection in the other domestic animals and in humans.

Table of results, one Yugoslav and seven Western references.

VICH, F.

For speedier transportation of imports and exports. p. 187.

Appeal for co-operation. p. 188.

ZELEZNICE, Prague, Vol. 4, no. 7, July 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

VICH, dr., inz.

"Rock pressure in mines" by St.Q.Isaacson. Reviewed by Vich.
Uhl 5 no.2:72 F '63.

VICH, Ivan, promovany ekonon.

Indexes of the work difficulty and their relation to personal material incentives. Prace mzda 10 no.2:72-79 F '62.

1. Technicko-organizacni vyzkumny ustav strojirensky, Praha.

VICH, Ivan, promovany ekonom

Raising the qualifications of workers in machinery industry.
Prace ma 10 no. 7:298-304 JI '62.

1. Technicko-organizacni vyzkumny ustav strojirensky.

VICH, Milan, inz.

Undistorted high-frequency signal. Sdel tech 12 no.2:58-59
F#64

VICH, O.

"New law concerning the economic relations between socialist organizations."
p. 97.

UHLI. (Ministerstvo paliv). Praha, Czechoslovakia, Vol. 1, No. 3,
Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

VICH, O., dr., inz.

Modification of conditions on retail gas delivery. Paliva
41 no.10:325-326 0 '61.

1. Ministerstvo paliv a energetiky.

VICH, O., dr.,inz.

International congress on coal preparation in Great Britain.
Uhl 4 no.2:68-69 F '62.

VICH, O., inz., dr.

"Coal, its formation and composition" by Wilfrid Francis. Reviewed
by O.Vich. Uhl 4 no.2:72 F '62.

VICH, Oldrich, dr., inz.

Pipe-line transportation of coal. Uhli 4 no.3:105 Mr '62.

VICH, Oldrich, dr., inz.

Noise control in mining operations. Uhl 4 no.8:277-279
Ag '62.

VICH, O., dr., ing.

"Theory and practice of the clean air in mines" by Howard L. Hartman.
Reviewed by O. Vich. Uhl 4 no.11:400 N '62.

VICH, Oldrich, dr., inz.

Laminate disks for filters in coal washing plants. Uhli 5
no.5:186 My '63.

VICH, Oldrich, dr. inz.

New type of mechanical support Roofmaster Mark 1 S. Uh11
5 no.8:290 Ag '63.

VICH, Oldrich, inz., JUDr.

~~NEW ECONOMIC CODE. UHLI 5 NO. 11:385-386 N '63.~~
New economic code. Uhlí 5 no. 11:385-386 N '63.

VICH, Oldrich, dr. inz.

Fourth International Conference on ~~layer~~ Control and Rock
Mechanics. Uhli 5 no. 12: 434 D '63.

VICH, Oldrich, dr. inz.

"Rock mechanics" by F. Mohr. Reviewed by Oldrich Vich.
Uhl 5 no. 12: 436 D '63.

VICH, O., JUDr. inz.

The new Economic Code. Paliya 44 no.10:318-319 0 '64.

1. Arbitration Department of the Ministry of Fuel, Prague.

VICH, O., dr. inz.

Practical use of electronic computers for evaluating coal
suitability for preparation. Paliva 45 no.4:134-136 Ap '65.

1. Ministry of Fuels, Prague.

VICH, O., dr. inz.

New basic conditions for delivery of solid fuels. Unli 7 no.2:
69 '65.

VICH, Z.; HAVRANKOVA, N.; STASEK, V.

Clinical experiences with telegammatherapy with the Theratron junior with particular reference to the treatment of bronchogenic carcinoma. Cesk. radiol. 19 no.3:194-201 My '65

1. Radiologicka klinika (prednosta: prof. dr. V. Svab, DrSc.) a onkologicka laborator (vedouci: prof. dr. J. Venta) fakulty vseobecneho lekarstvi v Praze.

PETRASEK, J.; DUBOVSKY, J.; VICH, Z.

Excretion of 3,4-dihydroxyphenylacetic acid (DOPAC) in patients with neuroblastoma and pheochromocytoma. Cas. lek. cesk. 103 no.24: 663-664 12 Je'64.

1.III.interni klinika fakulty vseobecneho lekarstvi KU [Karlovy university] v Praze (prednosta: akademik J.Charvat) a Radiologicka klinika fakulty vseobecneho lekarstvi KU [Karlovy university] v Praze (prednosta: prof. dr. V.Svab, DrSc.).

CZECHOSLOVAKIA

PETRASEK, J., DOBOVSKI, J., and VICH, Z., Third Clinic of Internal Medicine (III. interni klinika), Academician J. CHARVAT, director; and Clinic of Radiology (Radiologicka klinika), Prof. Dr V. SVAB, director; both at the Faculty of General Medicine (Fakulta vseobecneho lekarstvi), Charles University, Prague [individual affiliations cannot be determined].

"Endocrine Activity of Some Tumors of the Sympathetic Nervous System"

Prague, Ceskoslovenska Neurologie, Vol 26(59), No 4, July 1963, pp 266-270.

Abstract [Authors' English summary]: On the basis of their own experience the authors recommend the determination of the presence of 3-methoxy-4-hydroxymandelic (vanilmandelic) acid as the principal metabolite of catecholamines. In the group of investigated persons they found high values of this metabolite in the malignant tumors of the sympathetic nervous system: sympathoblastoma, sympathogonioma, ganglioneuroblastoma, and paraganglioma. The determination of vanilmandelic acid after surgery serves as a quantitative indicator of the removal of the tumor. Attention is drawn to the highly increased excretion of 3-methoxy-4-hydroxyphenylacetic (homovanilic) acid in sympathoblastoma, sympathogonioma, and ganglioneuroblastoma. Fifteen references, including 5 Czech.

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PETRASEK, J.; DUBOVSKY, J.; VICH, Z. "

Excretion of some catecholamine metabolites in sympathoblastomas.
Cas.lek.cesk 100 no.42:1335-1336 20 0 '61.

1. II interni klinika KU Praha, prednosta akademik Josef Charvat.
Radiologicka klinika KU Praha, prednosta prof. MUDr. Vaclav Svab.

(NEUROBLASTOMA urine) (CATECHOLAMINES urine)

BEK, Vaclav; SKALOVA, Nadezda; VICH, Zdenek

On causes of late diagnosis of malignant tumors. I. Tumors difficult to diagnose and incurable tumors. Cas. lek. cesk. 101 no.18:550-555 My '62.

1. Radiologicka klinika lebarske fakulty KU v Praze, prednosta prof. dr V. Svab.

(NEOPLASMS diag)

BEK, Vaclav; SKALOVA, Nadezda; VICH, Zdenek

On the causes of late diagnosis of malignant tumors. Tumors accessible for early diagnoses. Cas. lek. cesk. 101 no.20:623-629 18 My '62.

1. Radiologicka lekarske fakulty KU, Praha, prednosta prof. dr. V.Svab.

(NEOPLASMS diagnosis)

CERNOCH, M.; STEPAN, Z.; VICHA, J.

Effect of chloroform narcosis upon mitosis in rat liver. Chekh.
biol. 2 no.2:102-103 Ap '53. (MLRA 7:2)

1. Institut meditsinskoy khimii universiteta Palatskogo, Olomouts.
(Chloroform--Physiological effect) (Karyokinesis)

84380

Z/038/60/000/004/004/005
A201/A026

21.5200 (1518)

AUTHOR: Vicha, Jaromir

TITLE: An Informative Review of Amplifiers Used in Nuclear Engineering

PERIODICAL: Jaderná energie, 1960⁶, No. 4, pp. 125 - 126

TEXT: The (UJV developed the following amplifier types for use in nuclear physics research: the linear amplifier I (Fig. 1) is a multi-purpose apparatus especially suited for work with scintillation counters. It has two outputs, one for a maximum pulse height of 10 v, and one for 100 v. Power-fed jacks for a preamplifier are also installed on the front panel. Specifications: Sensitivity: 75; 250; 750 mv; 2.5; 7.5; 25v; Gain: 1,300 maximum. Gain regulation: continuous. Polarity of input pulses: positive and negative. Polarity of output pulses: positive. Maximum output pulse height and impedance of output I: 10 v and 200 ohms, respectively. Maximum output pulse height and impedance of output II: 10 v and 20 ohms, respectively. Maximum output pulse height and impedance of output III: 100 v and 200 ohms, respectively. Upper limiting frequency: 2.2 Mc. Pulse shaping 1; 0.6; 0.3 μ sec. linearity: $\pm 1\%$. Allowed overload: 2x. Operation from grid: 220 v $\pm 10\%$. Power input 270 w. - Linear amplifiers II and III (Fig. 2) are likewise designed for work with scintillation

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counters. While the linear amplifier II is a self-contained amplifier with a maximum pulse height of 10 v, the linear amplifier III is used only as the output stage of some other amplifier with an output pulse height of 100 v. The following are the specifications of the linear amplifier II: Sensitivity: 0.1; 0.3; 1; 3 v. Gain: 100 maximum. Gain regulation: continuous. Polarity of input pulses: positive and negative. Polarity of output pulses: positive. Output voltage: 10 v maximum. Output impedance: 200 ohms. Lower limiting frequencies 15; 50; 150 kc. Upper limiting frequencies: 150; 500 kc; 1.5; 4 Mc. Pulse shaping: by external shaping line. Linearity: $\pm 1\%$. Overload: 20x. Operation from grid: $220 \text{ v} \pm 10\%$. Power input 150 w. The following are the specifications of the linear amplifier III: Sensitivity: 10 v. Gain: 10. Polarity of input and output pulses: positive. Output voltage: 100 v maximum. Output impedance: 200 ohms. Lower limiting frequency: 10 kc. Upper limiting frequency: 4 Mc. Linearity: $\pm 1\%$. Overload: 20 x. Operation from grid: $220 \text{ v} \pm 10\%$. Power input: 200 w. - Linear amplifier IV (Fig. 3) is designed for amplification of low-level pulses of ionization chambers and proportional counters. Specifications: Sensitivity: 10; 30; 100; 300 mv; 1; 3 v; Gain: 10^4 maximum. Gain regulation: continuous. Polarity of input and output pulses: positive.

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itive. Maximum pulse height and impedance of output I: 10 v and 100 ohms, respectively. Maximum pulse height and impedance of output II: 100 v and 400 ohms, respectively. Linearity: $\pm 1\%$. Lower limiting frequencies: 500 cps; 1; 5; 10; 50 kc. Upper limiting frequencies: 20; 50; 100; 200; 500 kc; 1 Mc. Overload 100x (at the expense of partial reduction of the resolving power). Operation from grid: $220 \text{ v} \pm 10\%$. Power input: 90 w. - The UJV further developed a preamplifier for the linear amplifiers I and II (Fig. 2). It has a gain of 10 bringing the total gain of these amplifiers to about 10^4 . Another preamplifier for the linear amplifier IV is shown in Figure 3. It is designed for direct connection to ionization chambers and proportional counters by means of a standard threaded joint. It has a gain of 10^2 bringing the total gain of the amplifier IV to 10^6 . Due to its cushioned tube sockets and direct-current heating, the mean level of interfering voltages at the preamplifier input is about $40 \mu\text{v}$. - For coincidence measurements with a resolution time of the order of 10^{-9} sec, requiring amplification of pulses from scintillation counters with a minimum possible build-up time, the UJV has developed a wide-band amplifier with spread parameters (Fig. 4). It has a band with up to 180 Mc permitting pulse

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amplification with a build-up time of 2×10^{-9} sec. Specifications: Gain: 10. Input impedance: 150 ohms. Output impedance: 150 ohms. Maximum output pulse height: ± 4 v. Frequency range 0.2 to 180 Mc. - All the above amplifiers are built in standard cases permitting their arrangement on racks into various combinations of measuring systems. There are 4 photographs. ✓

ASSOCIATION: Ústav jaderného výzkumu ČSAV (Institute of Nuclear Research, ČSAV),
Prague

Card 4/4

VICHA, J.

"Transient effects in electric circuits" by J.Hlavka. Reviewed
by J.Vicha. Jaderna energie 6 no.9:311 S '60.

L 32865-66 EWP(1) IJP(c) BB/GG

SOURCE CODE: CZ/0038/65/000/006/0219/0220

ACC NR: AP6024070

AUTHOR: Vicha, Jaromir--Vikha, Ya.ORG: Nuclear Research Institute, CSAV, Rez (Ustav jaderneho vyzkumu CSAV)TITLE: Memory type E 100 B, for 1024 channelsSOURCE: Jaderna energie, no. 6, 1965, 219-220

TOPIC TAGS: computer memory, ferrite core memory, multichannel analyzer, pulse amplitude, binary code, memory time, cathode ray tube, computer technology, computer output unit, magnetic core/E 100 B magnetic core

ABSTRACT: In cooperation with the Computer Research Institute (VUMS), the Electronics Section of the Nuclear Research Institute developed a ferrite-core memory for 1024 channels, with a capacity of $(10^5 - 1)$ pulses/channel, intended for use in the multichannel time and amplitude analyzer. The memory proper consists of a matrix of $32 \times 32 \times 20$ Czechoslovak-made ferrite cores, type R1-T0. The principle of coincident half-current pulses is used to excite the cores in reading and writing. The address of the channel is given in binary code. The address register has ten binary columns, one series input, and three parallel inputs for the last three columns. The number of pulses in a channel is recorded in binary-decimal code. In addition to adding one, the arithmetic re-

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gister is able to form also the complement of the number recorded in the channel. The time of a memory cycle is about 20 μ sec. The memory has provisions for (1) displaying on the screen of a cathode ray tube the content of the entire memory, or of any two groups of 128, 256 or 512 channels; (2) the numerical display of the channel number and its content. Furthermore, an Arima RT 2 rapid printer, with a maximum speed of 23 channels per second, is also used for readout. [JPRS]

SUB CODE: 09 / SUM DATE: none

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S/123/62/000/013/005/021
A004/A101

AUTHORS: Crha, Zdeněk, Vicha, Vladimir

TITLE: Method of manufacturing tools with cermet bits

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 13, 1962, 13, abstract
13B86 (Czechoslovakian Patent No. 99008, 15.03.61)

TEXT: For joining two cermet layers - of higher strength and wear resistance - and their subsequent soldering onto a steel holder, the authors suggest to sinter in a mold under pressure the bits of cermet material which possesses a high wear resistance with stronger carbides of the same WC + Co series in the form of powder. Also additions of chromium, tantalum, niobium, molybdenum, boron and vanadium carbides are applicable. The sinter temperature depends on the composition of the powdery mixture. During the sintering, the binding ductile metal of the powder fuses together with the binder of the bit, owing to which a high strength of the joint and the absence of a sharply expressed surface of separation are ensured.

V. Sheynfinkel

[Abstracter's note: Complete translation]

Card 1/1

VICHA, V.

New uses for vanadium carbides in production. p. 257. *TECHNICKI PRACE*.
(Statne nakladatelstvo technickej literatury) Vol. 8, no. 6, June 1956.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

VICHA, V.

Notes on the durability of sintered carbides in machining.

P. 5. (TECHNICKA PRACA) (Bratislava, Czechoslovakia) Vol. 10, no. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

VICHA, V.

"Electrospark machining of sintered carbides. p. 11"

STROJIRENSKA VYROBA (Ministerstvo tezkeho strojirenstvi, Ministerstvo presneho
strojirenstvi a Ministerstvo automobiloveho prumyslu a zemedelskych stroju) Praha,
Czechoslovakia, Vol. 7, No. 1, 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 6 June 1959
Uncl.

Z/009/60/010/02/001/026
E142/E235

AUTHOR: Vícha, V

TITLE: Development and Future Outlook of Petrochemistry¹ in
Czechoslovakia

PERIODICAL: Chemický Průmysl, 1960, Vol 10, Nr 2, pp 57-59

ABSTRACT: After reviewing the development of the petrochemical industry throughout the world from 1956 onwards, and giving estimated output figures for 1965 (Fig 1) and the development of petrochemicals in Europe between 1956 to 1960 (Fig 2), the author discusses some of the most important methods used for processing petrochemicals: (a) the pyrolysis of gaseous and liquid hydrocarbons; (b) the cracking of methane; (c) high temperature pyrolysis of liquid petroleum hydrocarbons and (d) the various direct chlorination, oxidation and other reactions for gaseous and liquid hydrocarbons and (e) production of aromatic hydrocarbons from petroleum fractions. It is hoped that pyrolysis of low octane gasoline will cover the specific requirements of gaseous olefins and diolefins in Czechoslovakia during the third Five Year Plan; natural gas is to be used as supplementary raw material for the production of synthesis gas and acetylene. Gasoline from

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Development and Future Outlook of Petrochemistry in Czechoslovakia
petroleum will be used for obtaining ethylene and higher olefins as this material has a high hydrogen content (Fig 3). It is planned to erect factories for the pyrolysis of hydrocarbon gases and gasoline which will have an annual capacity of 200000 tons; these will supply raw materials for the production of synthetic rubber, plastics and chemical fibres. The output of ethylene is to be increased to 100000 tons/annum; that of propylene to over 50000 tons/annum. Butadiene, acetylene and butylenes will also be obtained from petrochemicals. There are 5 figures.

ASSOCIATION: Ministerstvo chemického průmyslu (Ministry for the Chemical Industry)

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P/013/60/000/002/002/003
B124/B220

AUTHORS: Valdauf, B., Engineer, Vícha, V., Engineer

TITLE: Prospects of the production of liquid fuels and of the development of the petrochemical industry

PERIODICAL: Chemik, no. 2, 1960, 59-61

TEXT: Up to now, liquid fuels have been produced in Czechoslovakia by processing petroleum as well as brown coal tar in a ratio of about 1:1; the development, however, renders the present situation unbearable. The rapidly increasing demand for liquid fuels had to be met by importation of petroleum, since the own supplies were insufficient. From an economic point of view, a combination of distillation with the cracking or high-pressure hydrogenation of the distillation residue proved to be advantageous, since by simultaneous application of all three processes a yield in liquid fuels of more than 92% can be obtained; the investment cost is, however, high. In order to speed up the construction of new facilities for the processing of petroleum, the most simple technological method had

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Prospects of the production...


to be applied, i.e., direct distillation, refining by hydrogenation, and reforming. Under the given conditions, the construction of a refinery having a yearly capacity of 4,000,000 tons of petroleum is economically justified. Of great importance is a uniform distribution of refineries all over the country. It is planned to supply the refineries with petroleum by means of a central pipeline system. By 1965, the demand for aromatic hydrocarbons will be covered by crude benzene from coke, high-temperature tars and brown coal tar, i.e., the demand for phenol partly by brown coal tar and partly by high-temperature tar, and that for acetylene partly by coke. The olefin gases and other hydrocarbons, and the amounts of acetylene lacking at present will be obtained from petrochemical raw materials, i.e., petroleum and natural gas. As basic technological processes were chosen: 1) the pyrolysis of saturated hydrocarbons and benzene and their separation by distillation, and 2) the incomplete combustion of natural gas, whereby acetylene as well as synthetic gas are obtained. The increase in the production of liquid fuels will no longer attain the figures of the period 1960-1965; after 1965 attention will be focused on a more economic distribution and on

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improved quality of liquid fuels and other products obtained from petroleum. Czechoslovakia is not able, however, to reach the targets in the development of the petrochemical industry by herself, but only in cooperation with the Council for Mutual Economic Aid, where also the collaboration between the PRL (Polish People's Republic) and the Czechoslovakian Republic plays an important part. There are 5 figures.



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Z/031/62/000/001/002/002
D006/D102

AUTHORS: Bruzda, Ervín, Engineer, and Vícha, Vladimír, Engineer
TITLE: Development and application of new cemented carbide types
PERIODICAL: Strojírenská výroba, no. 1, 1962, 9-12

TEXT: The authors describe new Czechoslovak sintered carbide grades in order to familiarize machine-tool operators with their properties and specific applications. The CSSR currently produces a total of 19 carbide grades, three of which are still in pilot production. The majority of the Czechoslovak carbides are composed of WC, TiC and Co, some grades contain, in addition, also Cr_3C_2 and TaC. The die grades consist of WC and Co only. The strength of the individual grades ranges from 90 to 240 kg/mm², the hardness from 82 to 91 H_{RA} and the specific gravity from 10.5 to 13.0 g/cm³. The following new carbide types are dealt with in detail: S4 and S5 for heavy-duty roughing and heavy feed loads; F1 and F2 for light turning, finishing and boring steel and cast iron at high cutting speeds; U1 and U2 universal carbide grades for machining high-alloy steels and hard-to-machine alloys. They were developed by the Výzkumný ústav pro práškovou metalurgii (Research Institute for Powder Metallurgy); and the G5 and G6 die grades. The article also lists the machining applications for which the individual grades are best suitable and in

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D006/D102

Development and application

some cases gives also the machining conditions such as cutting speed, feed, and edge lifetime. It also reports results of various tests conducted at the Závody V. I. Lenina (V.I. Lenin Works) in Plzeň, the Adamovské strojírny (Adamov Machine Building Works), the Sigma in Lutín, Přerovské strojírny (Přerov Machine Building Works), ČKD in Prague, and the Moravskoslezská armaturka (Moravian-Silesian Fittings Plant) in Dolní Benešov. There are 4 tables. ✓

ASSOCIATION: Výzkumný ústav pro práškovou metalurgii (Research Institute for Powder Metallurgy), Šumperk.

Card 2/2

VICHAS, A. I. Cand Agr Sci -- (diss) ^{Center} "Some agricultural engineering
7 ^{steps} taken for increasing the ^{yield} productivity and improving the quality
of ~~some~~ "dolgunets" flex (w.) Kaunas, 1957. 27 pp. (Min Agr USSR.
Lithuanian Agr Acad). 120 copies.
(KL, 8-58, 107)

-44-

VICHEK, Ya.; SHTARK, V.

Just when shall we get new sack cleaning machines? Muk.elev.pron.23
no.8:32 Ag '57. (MIRA 10:11)

1. Leningradskaya fabrika myagkoy tary.
(Bagging)

TIKHOMOVA, L.V., inzhener; VICHEPENIN, A.Ye., inzhener, redaktor; VERINA,
G.P., tekhnicheskii redaktor.

[Advanced methods of manufacturing building materials] Peredovye
metody proizvodstva stroitel'nykh materialov. Moskva, Gos.transp.
zhel-dor.izd-vo, 1956.93 p. (MIRA 9:6)
(Building materials industry)

VICHEREK, Jiri

Notes on the flora of Silesia. Prir cas slezsky 23 no.2:273-
285 '62.

VICHEREK, Jiri

Clarex ericetorum Poll., the heath sedge, in Silesia. Prir cas
slezsky 22 no.4:570 '61.

VICHEREK, Jiri

Occurrence of *Aster alpinus* L. in Hruby Jeseník Mountains. Príd
cas slezsky 23 no.3:368-369 '62.